

INSURV PREPARATION CHECKLIST

Upon notification that an inspection will be conducted by the Board of Inspection and Survey, it is recommended that an INSURV Coordinator be assigned, as soon as feasible, to act as the ship's point of contact concerning INSURV matters. The following information is provided to answer some of the more frequently asked questions, list the data the board requires from the ship, and provide some guidelines for conduct of the inspection. The INSURV Coordinator's counterpart on the INSURV Sub Board is an officer assigned as the Recorder for the inspection. The Recorder's name and contact information are provided in paragraph one of the INSURV letter. You should direct any general questions to the Recorder. Specific technical questions may be addressed to the Chief Inspectors.

DC/Habitability:	CAPT Roeske	462-7693 X 3037, roeske@insurv.nosc.mil
Electrical:	CDR Swensen	462-7693 X 3018, swensen@insurv.nosc.mil
Propulsion/Reactor:	LCDR Jacobsen	462-7693 X 3017, jacobsen@insurv.nosc.mil
Auxiliaries:	LCDR Stapleton	462-7693 X 3016, stapleton@insurv.nosc.mil
Weps/Deck:	LCDR Riggle	462-7693 X 3019, riggle@insurv.nosc.mil
Nav/Ops/IS:	LCDR Knight	462-7693 X 3015, knight@insurv.nosc.mil
NavOSH/EP/Med:	CDR Horn	462-7578 X 3028, horn@insurv.nosc.mil
	LT Carlson	462-7578 X 3073, carlson@insurv.nosc.mil
	LT Davis	462-7578 X 3089, davis@insurv.nosc.mil

You should receive the following messages approximately 30 days prior to the inspection:

Visit request: Lists the names and clearances of the chief inspectors.

Assist request: Lists the assistant inspectors the chief inspectors are requesting from various organizations (FTSCLANT/FTSCPAC, NSWC, etc). You should also receive clearance messages from these organizations. It is important the Navigator ensures all the clearance messages are placed together in the topside clearance binder (or loaded in the handheld) and the topside watches know where they are for ease of access on the day of the inspection. Some of these personnel will be riding the ship for the underway portion of the exam. The messages will indicate who is riding.

Services request: This is the most important message of the three. It lists in detail what services and the organization responsible to provide services during the inspection. However, the ship needs to ensure the other organizations are ready to support. Items that are in this message include, racetrack, VLS platform, comms circuits, items required from PMT, CADET, etc.

The following section is provided to make the inspection preparations and conduct smoother:

____ Review INSURVINST 4730.2D. Distribute copies of each chapter to applicable depts.

____ Contact the INSURV Recorder. Provide the information on the INSPECTION INFORMATION DATA sheet (last page of this enclosure). This info can also be sent via email or fax.

____ Submit listing of recently completed inspections/assessments per enclosure (3) of the INSURV letter.

____ Prepare a proposed Schedule of Events (SOE), using sample agenda in the instruction. Send the completed SOE to the INSURV Recorder NLT 30 days prior to the MI.

Enclosure (1)

_____ Use PLAD "PRESINSURV NORFOLK VA//02/" for Naval Messages to the INSURV Sub Board.

In addition to the information required by INSURVINST 4730.2D, the following information is required for the Board:

_____ A hardcopy of all active CASREPS (Initial CASREP only, updates not required).

_____ Cannibalization List.

_____ CO's letter of concern - typical items include: equipment or systems degraded or inoperative, manning problems, any key issues regarding the ship's material condition.

_____ A copy of CO's Temporary Standing Orders (TSO) in the Senior Member and WP folders.

_____ A copy of Engineer's TSOs in the MP folder.

_____ A copy of the CO's Standing Order for going to PD in the Senior Member's folder.

_____ A copy of OSARs generated in the past year for any hatches or watertight doors in the Senior Member and WP folders.

_____ Arrange **Four** parking spaces reserved specifically for INSURV Chief inspectors.

Your goal here is for us to be able to drive up to the pier, have the parking spaces labeled and empty, and still have our cars there (not towed) when we come back. We will also need the spaces during the open and inspect phase.

_____ Insure all clearance messages are placed together in the topside binder prior to arrival and after return to port.

_____ **Important:** Provide a electronic copy of your CSMP and SFWL items on floppy disk as soon as possible after the start of the inspection. The disk should be generated just prior to the board's arrival.

SNAP ships: Two files, first is all "Active Deferred Work Items" in the 80 column text format (sometimes called a reconciliation file or tapout file). This file looks like gibberish when viewed in a word processor (it has UIC the whole way down the left margin, etc.), but is exactly what our computers need. The second file is all "Active SFWL Items" (if your ship uses them) as a text report (this one is readable in a word processor).

OHMS NG ships: You should be able to give us both SFWL and CSMP items in the 80 Column text computer importable format as described for SNAP ships above.

_____ Workspace: SSN – wardroom; SSBN – crews lounge. Please provide an HP Laser Jet 4 Plus or better dedicated printer (with a long printer cable), formatted floppy disks (1 box), 8 plug power strip (2), inspection mirrors (2), 5x8 notebooks (4) and flashlights (2) in the board's workspace.

_____ Meals: We eat working meals in the wardroom on SSNs (CO welcome to join us) and we eat in the crews mess on SSBNs. Captain Roeske will eat in the wardroom on SSBNs.

_____ Berthing: for SSNs, we will sleep in crew berthing (usually 21 man). CAPT Roeske will sleep either in the XO's stateroom or 21 man, whatever the ship wants. Please assign racks as INSURV and let the INSURV Recorder figure out who is sleeping where. For SSBNs, we will sleep in crews berthing adjacent to the crews lounge. CAPT Roeske will sleep in either the XO's stateroom or in crews berthing, whatever the ship wants. Please provide a towel on each rider's rack.

_____ We do not recommend going port and starboard.

_____ We do not recommend leaving a lot of people in to help with tagouts and open/inspect preps, since we do more inspections at sea and a lot less in port. Generally we open up gear such as HPACs or APV-1 valves if we have a reason to suspect we will find a big problem. As another example, we usually don't ask to go into an impulse tank unless we see debris during waterslugs.

_____ Try not to schedule interfering evolutions (weapons load/offload, reactor accident drills, deployment debriefs) until after the final day.

Enclosure (1)

_____ CAPT Roeske will want the ship's diving officer to brief him on rig for dive deficiencies prior to submerging, and will want to review the equilibrium polygon sometime during the inspection. Additionally, he will monitor PMS on all damage control equipment.

_____ We will turn in TLDs as we pull in if you want. A couple of us will need to keep them for the next day (the MP/RX inspector for example). After we all turn in TLDs, we will need the exposures before we leave on Thursday.

_____ Plan to conduct the TLD brief immediately upon the board's arrival. Plan to use the mess decks for the in-brief after the TLD brief.

_____ Determine mess bill amount and time of collection. Many inspectors will not return to the ship after the underway day, so mess bill collection is exceptionally difficult if not completed by return to port.

_____ Provide the Recorder with a signed Submarine Underway Ride Time sheet.

_____ Plan for an outbrief with the Commodore, Ship's CO and Senior Member during the afternoon (~1500-1700) on the final day in the CO's stateroom. The INSURV Board members will debrief the XO and Department Heads during the final day. This is best done one-on-one.

_____ We will provide a feedback form/disk. Please collect input during the inspection. The form/disk can be given to the senior member after the outbrief or can be mailed/faxed/emailed as desired.

The following are specific items from each of the chief inspectors.

DC and Habitability inspector, CAPT Roeske:

- The Damage Control Petty Officer (DCPO) must be off of the watchbill for the underway portion of the inspection. A second individual is recommended. This may be a divisional DCPO if available or we can use an off-going W/S. Scales for weighing CO2/AFFF extinguishers, PKP CO2 cartridges, and LIOH canisters must be available for the underway portion of the inspection. If the ship does not have them, make arrangements ahead of time to borrow calibrated scales. Note: INSURVINST 4730.2D says to use 0-10 lb scales for LIOH canisters. The proper scales per the MRC are 0-25 lbs.
- Make sure that a knowledgeable Petty Officer will be available to enter the escape trunk with the DC inspector at Test Depth. He must be able to efficiently place the sea pressure gauge on service and charge a steinke hood (Non-SEIE/test stole charging valves (SCV)(SEIE). For SEIE equipped boats, ensure you have either a training SEIE suit or the Hale-Hamilton test gage available to test the operation of the SCVs.
- Have the bunk pans in berthing inspected some time prior to the exam. Provide the Senior Member with a list of those requiring repair.

Electrical inspector, CDR Swensen:

- Ensure the Detroit pressure switch data table is filled out with trip, reset, and specs. Reset any safety switches that are out of spec with the actual values prior to resetting in the table. Fill out applicable data sheets from the instruction prior to our arrival.
- I will provide a spreadsheet with equipment, controllers, power panels and switchboards I wish to inspect. I can email/fax this to you ahead of time if you desire.
- Most of the inspections underway are done using the guidance for electrical safety in NSTM chapter 300 for not to break the plane visual inspections.
- You must have a senior electrician off the watchbill to provide support along with the offgoing watch section.
- A rechargeable screwdriver/nut driver will save a lot of effort in loosening/tightening switchboard panel screws.
- We will do thermal imaging, so you will have to shift running equipment often.

Weapons and Deck inspector, LCDR Riggle:

- We will do several hours of sound monitoring. There is about 8 hours total; most can be combined with other events (for example, cav curve check can be done as you are increasing speed for something else). About two hours are required for dedicated TB-16 Los cuts. I want to see both sides, one speed (5 kts actual speed by log), and conduct HVMS at the standard machinery lineup at the same time (requires coordination with the ENG). We will also review all your external monitoring documentation and your noise ESL during the first day to establish what we expect to hear during the underway.
- Please have ready to inspect: 10 each MK V AIULP, Kapoks, and Steinke hoods/SEIE Suites along with man overboard gear and helo transfer gear, both of which should be already broken out of bag. I will inspect those items as soon as I can.
- Plan for 3 inch launcher interlock checks as soon as possible while still on the surface.
- Instrumented waterslugs and PVC flowrate checks will be done whenever you schedule them, either between now and INSURV start or the day we get back.
- Be ready for impulse tank entry on open and inspect day (work package, replacement gasket, gas free). We will decide during the underway whether we are going into one or both impulse tanks, that is too late to start to look for the gasket.

Main Propulsion and Reactor inspector, LCDR Jacobsen:

- Review NSTM chapter 231 for checking turbine bearing setpoints. We will perform this during the inspection and it goes a lot smoother if the ship is familiar with the guidance in the NSTM.
- The maximum power run starts at full and works up to flank while cycling the rudder. This is for checking bearing setpoints
- I will inspect the reduction gears and reactor compartment after return to port

Auxiliary inspector, LCDR Stapleton:

- Check with E-division for Pressure Switch data they need for A division and air system (A and/or M-div) equipment.
- SSN: We will most likely find out of specification URO-16 parameters during testing conducted just after mooring. You may want to line up any support organizations required for corrective action in advance if the ship is scheduled for another underway immediately following INSURV.
- SSBN: Ensure CADET testing of control surfaces is scheduled as soon as possible following RTP. Get CADET report to AX inspector ASAP after completion!
- All: Provide most recent URO-16 "as found condition" data available upon INSURV board arrival.
- If the ship has fairwater planes linkages/cylinders in the bridge trunk. Access will be required during cycling near test depth.

NAV/OPS/IS inspector, LCDR Knight:

- You must have a senior and knowledgeable NAVOPS Rep assigned to assist me and drive the inspection for the department.
- Ensure necessary communications circuit testing preparations (including SPECOMM preps for SSNs) are setup prior to the inspection. (Coordination with Squadron is required).
- Provide a list of degraded or out of commission LAN equipment (with serial numbers) to me during the LAN inspection.
- SSN: Conduct a BRD-7, Shroud Test by IMA/FTSC 30 days prior to the inspection. Have results on hand for my review.

- SSN: Conduct a Type-18, RF Gain Test by IMA 30 days prior to the inspection. Have results on hand for my review.
- SSN: Conduct Type-18, Yoke Bearing and Bumper Height Verification by IMA 30 days prior to the inspection. Have results on hand for my review.
- SSBN: Conduct Type 8, EW RF Test by IMA 30 days prior to the inspection. Have results on hand for my review.
- SSN/SSBN: Verify the IMA is ready to support landing the racetrack immediately upon return to port in order to start the sail inspection at 0800 the next day. For SSNs, remove one side of lower sail bay access plates. Ensure the NAVSSES Antenna Representative is available to support the inspection. The Sail Coordinator is required to accompany me during the sail inspection.
- PC: Verify Man Aloft Chits hung and mast ready for inspection on Day 1, immediately following the in-brief.

NAVOSH/EP/MED/SUPPLY Inspector, CDR Horn, LT Durand, or LT Carlson:

- First down load inspection check lists from INSURV webpage ("Insp. Preps" section).
- The following records should be available for the inspector upon arrival:
 - Collateral Duty List (note check against SSORM collateral duty list).
 - Baseline IH Survey and any follow-up surveys or testing.
 - File of Mishap Reports for last 5 years (or whatever is available)
 - File of Accident and Injury Reports
 - Hazard reports, zone inspection results, or log of safety hazards tracked to correction.
 - Safety Council minutes and mishap statistics
 - Training plan for new personnel showing safety topics and schedule for annual required NAVOSH and Environmental topics (such as electrical safety).
 - Personnel PQS/training:
 - Watchstation 303 – Heat Stress Monitor
 - Safety Officer
 - Afloat Environmental Protection Coordinator (AEPC)
 - Supply Officer training for Atmosphere Control/Hazardous Material
 - Supply personnel holding SNEC 9595 for HMC&M Technician (at least one)
 - Asbestos plan (required for asbestos gasket replacement) see OPNAVINST 5100.19 (series).
 - Ozone Depleting Substance (ODS) Maintenance Personnel EPA certification documentation.
 - List of all personnel in medical surveillance for Hearing, Asbestos, etc.
- The inspector will need to see the MDR, the Safety Officer, the Supply Officer, and the AEPC.
- Major items to review:
 - Inventory the cutting/welding kit with one of the nuclear welders.
 - Open and inspect all steam suits.
 - Inventory OTTO Fuel spill kits.
 - Gas Free Engineering equipment and all detector tubes.
 - SHIMS atmosphere control/HAZMAT program
 - Lockers where HAZMAT is stored. Lockers will need to be unlocked for inspection.
 - Oven/deep fat fryer temperatures, shut down switches/trip devices, AEPC system check (will require an A Division personnel for assistance). This area is usually conducted in the evening on the first day after supper cleanup.
 - Tag Out
- For questions and additional information please email one of the submarine NAVOSH inspectors or contact your TYCOM safety/industrial hygiene officer.

INSPECTION INFORMATION DATA

SHIP	
HULL NUMBER	
INSPECTION DATES	
INSURV RECORDER	
INSURV RECORDER EMAIL/PHONE	

SHIP DATA

COMMISSIONING DATE	DD MMM YYYY
Last Maintenance period (SRA, ERO, DMP, ERP)	Start Date: _____ Stop Date: _____ Type: _____ Shipyard: _____ Location: _____
Next maintenance period	Start Date: _____ Stop Date: _____ Type: _____ Shipyard: _____ Location: _____
LAST TARGET / CSRR COMPLETED (or upcoming, if soon)	DDD MMM YY / DDD MMM YY
LAST DEPLOYMENT COMPLETED	Start Date: _____ Finish Date: _____

SHIP PERSONNEL/CONTACT DATA

COMMANDING OFFICER (COMMAND DATE) (Rank First, MI, Last, (dd Mmm yyyy))	
EXECUTIVE OFFICER (Rank First, Last)	
INSURV COORDINATOR (Rank/Rate First, Last)	
CO/XO PHONE (###) ###-#### DSN ###	DSN
WARDROOM PHONE (###) ###-#### DSN ###	DSN
CSS (##) POC (Rank First, Last, Position)	
SSSU POC (Rank First, Last)	
COMSUBGRU ## (Rank First, Last)	
COMSUBRON (Commodore's name) (Rank First, MI, Last)	
SUBRON --- MATERIAL PHONE/FAX/E-MAIL Phone - (###) ###-#### DSN ### Fax - (###) ###-#### DSN ### Email - XXX@XXXXX	